What is claimed is:

1. An assembly for providing an electrode for an electrical energy storage device, the assembly comprising:

a) a support for a current collector, the support comprising upper and lower support plates having aligned openings, wherein the upper and lower support plates are manipulatable with respect to each other to capture a current collector there between intermediate the aligned openings;

b) a conduit having a surrounding sidewall extending along a longitudinal axis to opposed first and second conduit ends, the conduit being in flow communication with the platform openings and the current collector with the first conduit end adjacent to the current collector and the second conduit end spaced vertically above the first conduit end; and

c) at least one planar sifting screen supported by the conduit generally normal to the longitudinal axis thereof and spaced vertically above the current collector and the first conduit end, wherein the conduit provides for an electrode active material introduced into the second conduit end to fall through the conduit, through the at least one sifting screen and onto the current collector as a generally uniform layer thereon.

2. The assembly of claim 1 wherein the lower support plate includes a lower plug that is vertically adjustable with respect to an upper support surface of the lower support plate so that when a current collector is captured between the upper and lower support plates, the space below the current collector for electrode active material is adjustable to a desired thickness.

3. The assembly of claim 1 wherein the conduit is removable from the support and the opening in the upper support plate is capable of receiving a plug resting on the electrode active material filled in on top of the current collector for pressing the active material to both sides of the current collector.

4. The assembly of claim 1 wherein the conduit supports at least two planar sifting screens spaced apart from each other between the first and second conduit ends.

5 The assembly of claim 4 wherein the sifting screens each comprise warp and weft strands oriented generally perpendicular to each other.

6. The assembly of claim 5 wherein the warp and weft strands of a first one of the sifting screens are oriented from about 10° to about 80° out of direct alignment with respect to the warp and weft strands of a second one of the sifting screens.

7. The assembly of claim 1 wherein the second end of the conduit comprises a funnel-shaped opening.

8. The assembly of claim 7 wherein the funnel-shaped opening restricts the flow of electrode active material through the conduit to a rate of about 0.1 cc/sec. to about 1.0 cc/sec.

9. A method for providing an electrode for an electrical energy storage device, comprising the steps of:

a) providing a support for a current collector, the support comprising upper and lower support plates having aligned openings;

b) positioning the current collector captured between the upper and lower support plates intermediate the aligned openings;

c) providing a conduit having a surrounding sidewall extending along a longitudinal axis to opposed first and second conduit ends;

d) positioning the conduit in flow communication with the platform openings and the current collector with the first conduit end adjacent to the current collector and the second conduit end spaced vertically above the first conduit end, wherein the conduit includes at least one planar sifting screen oriented normal to the longitudinal axis of the conduit and spaced vertically above the current collector and the first conduit end; and

e) introducing an electrode active material into the second conduit end and letting it fall through the conduit, through the at least one sifting screen and onto the current collector as a generally uniform layer thereon.

10. The method of claim 9 including providing the conduit supporting at least two planar sifting screens spaced apart from each other between the first and second conduit ends.

11. The method of claim 10 including separating the two sifting screens by a distance of about one to three inches.

12. The method of claim 10 including providing the sifting screens each comprising warp and weft strands oriented generally perpendicular to each other.

13. The method of claim 12 including orienting the warp and weft strands of a first one of the sifting screens from about 10° to about 80° out of direct alignment with respect to the warp and weft strands of a second one of the sifting screens.

14. The method of claim 9 including providing the second end of the conduit comprises a funnel-shaped opening.

15. The method of claim 14 including having the funnel-shaped opening restricting the flow of electrode active material through the conduit to a rate of about 0.1 cc/sec. to about 1.0 cc/sec.

16. The method of claim 9 including providing the electrode active material as either a cathode active material for a primary cell or a secondary cell or an anode active material for a secondary cell.

17. The method of claim 9 including providing the current collector as either perforated or unperforated.

18. The method of claim 9 including providing the current collector having an open area of about 2% to about 80%.

19. The method of claim 9 including providing the current collector being perforated so that a portion of the electrode active material introduced into the conduit falls through the current collector to the opening in the lower support plate.

20. The method of claim 9 including removing the conduit from being in flow communication with the platform openings and then subjecting the electrode active material to a pressing force to contact it to the current collector.

21. The method of claim 9 including selecting the electrode active material from the group consisting of silver vanadium oxide, copper silver vanadium oxide, manganese dioxide, cobalt oxide, nickel oxide, copper vanadium oxide, titanium disulfide, copper oxide, copper sulfide, iron sulfide, iron disulfide, fluorinated carbon, $LiNiO_2$, $LiMn_2O_4$, $LiCoO_2$, $LiCo_{0.92}Sn_{0.08}O_2$ and $LiCo_{1-x}Ni_xO_2$, and mixtures thereof.